HAYDOCK URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

1895.

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HAYDOCK,
5th March, 1896.

To the Chairman of the Haydock Urban District Council.

SIR,

I have the honour to submit to your Council my Annual Report for the year 1895, this being the seventh complete Annual Report which I have had to present since my appointment as Medical Officer of Health for the Urban Sanitary District of Haydock.

POPULATION.

In proceeding to draw up the statistics relating to Life and Death, which form so essential a part of the Annual Report of a Medical Officer of Health, it is of the greatest importance that as correct an estimate as possible should be arrived at of the population of the district, for it is obvious that if the population be over-estimated, the resulting statistics will present a more favourable aspect than the true facts warrant, while, on the other hand, too low an estimate will result in figures being presented which make things look worse than they really are.

The only certain method of learning the true population of a district is that of direct enumeration. This method in our country is only available once in ten years, when the law directs that a census shall be taken. It is greatly to be desired that this official census should be made at more frequent intervals than ten years, and that our Government should adopt the custom which prevails in some other countries, of numbering the people at least once in five years. This intermediate census need not be nearly so elaborate or costly as the other, for from a Public Health point of view, the chief points required in a census are simply to ascertain (1) the total number of persons in each inhabited house, and (2) their respective sexes and ages. Apart from the machinery of the central Government being set in motion, it might be possible for Local Sanitary Authorities, at comparatively little trouble and expense, to take a census of their respective districts, directed simply to the ascertainment of the facts just alluded to. Such procedure is just now very desirable in Haydock, for the sake of having the requisite data for preparing separate statistics for the three Wards into which the Township has recently been divided.

At the last Census, taken at the end of the first quarter of the year 1891, the enumerated population of the Township of Haydock was 6,535, including 3,509 males and 3,206 females Since that time the only certain fact ascertainable is that up to the middle of the year 1895 the number of births has exceeded the number of deaths by 597, this being the "natural increase" of population. If, therefore, this were the only cause of variation of population, the simple addition of the number 597 to 6,535 would give the population of Haydock for the year 1895 as 7,132. Another cause of variation, however, has to be taken into account, viz., that persons are continually leaving the district, or "emigrating," and others are coming into it, or "immigrating." As no records of such removals are kept, there are no means of ascertaining their exact numbers. Some method of calculation has, therefore, to be resorted to, in order to arrive at an approximate estimate of the population for any given year. There are three chief methods available.

I.—The method of the Registrar-General, which is the one usually adopted.

Starting with the known number of the population as enumerated at the last census, and the number, also known, found at the census preceding the last, and finding the difference of increase or decrease in the ten years interval, the assumption is made that the same "rate" of increase or decrease will continue to prevail during the ten years which have to elapse before the next census is taken.

This calculation for Haydock for the year 1895 is as follows :—

Population at Census 1891 = 6,535 = log. 3.8152456
Population at Census 1881 = 5,863 = log. 3.7681119

$$\text{log. } 3.8152456 + \frac{\text{log. } 3.8152456 - \text{log. } 3.7681119}{10} \times (4 + \tfrac{1}{4}) =$$

$$\text{log. } 3.8352737 = 6843$$

By this method of estimation, therefore, the population of Haydock for the year 1895 is 6843. The assumption, however, on which it is based, viz., that the same "rate of increase" is continuing from 1891 onwards, as that which existed from 1881 to 1891, is one which may or may not be true. The results to be obtained by the two other methods of estimation hereinafter given, will afford sufficient evidence to show that by the method now in question the present population of Haydock is considerably under-estimated.

II.—The method based on the ascertainment of the number of inhabited houses in the District at the middle of the year, and on the assumption that the average number of inhabitants per house remains the same as that ascertained at the preceding census.

It has been found as a matter of observation and experience that in most districts the average number of inhabitants per house remains fairly constant for long periods.

For example, in Haydock the numbers for the last three censuses were as follow :—

Census.	Average number of Inhabitants per house.
1871	5·85
1881	5·85
1891	5·88

While at the census of 1891 the number of inhabited houses in Haydock was 1,111, at the middle of 1895 the number had increased to 1,325, a difference of 214.

In order to arrive at some idea as to whether the same average number of inhabitants per house continues to exist as that found at the last census, I have caused enquiries to be made at 432 houses in the Township (about a third of the total number), and I have found that the average number of inhabitants per house, as regards these houses, works out to 6·35.

It is, therefore, a fair assumption to make, that as regards the total number of houses, the average number of inhabitants per house remains *at least* as high as 5·88, that found at the last census.

By multiplying 1,325 by 5·88 the number 7,791 is arrived at.

By this method of estimation, therefore, the population of Haydock for 1895 is 7,791.

III.—The third method is based on the assumption, which for most largely populated districts is found to be fairly correct, that the Birth-rate remains nearly constant in successive years.

Knowing, therefore, the number of births which have been registered during the year 1895 to have been 313, and that the average birth-rate per 1,000 of the population for the preceding 10 years (1885-94) has been 39·7, we have the proportion:—

No. of Births in 1895.		Populatlon in 1895.		Average Birth rate in preceding 10 years.		
313	:	x	::	39·7	:	1,000

$$x = \frac{313 \times 1{,}000}{39{\cdot}7} = 7{,}884$$

By this method, therefore, the population of Haydock for 1895 works out to 7,884.

The two last methods, it will be noted, work out to a nearly identical result, and one which is in excess of the Registrar-General's estimate by about a thousand.

I have no hestitation, therefore, in giving as my estimate of the population of Haydock for the year 1895 the number 7,800, and in expressing my belief that it affords a much nearer approximation to the truth than the number 6,843.

The Statistics of Population for the "Civil Parish" or Township of Haydock, compiled from the Official Census Records, as far back as they extend, are tabulated below.

Census.	Population of Haydock.	Increase in 10 years.	No. of Inhabited Houses.	Average No. of inhabitants per house.
1801	734	—	138	5·31
1811	805	71	147	5·47
1821	916	111	148	6·18
1831	934	18	155	6·02
1841	1,296	362	215	6·02
1851	1,994	698	338	5·89
1861	3,615	1,621	601	6·01
1871	5,286	1,671	903	5·85
1881	5,863	577	1,002	5·85
1891	6,535	672	1,111	5·88

AREA.

The area of the Township in statute acres is 2,409, giving an average population of 3·2 persons per acre.

BIRTHS.

During the year there were registered in the Township of Haydock 313 Births, including 166 males and 147 females.

The Birth-rate was equivalent to 40·1 per 1,000, as against 40·4 in the year before, and 39·7 the yearly average of the preceding 10 years.

Of the Births registered 15 were "illegitimate," an unfavourable contrast to the year 1894, when only 2 such births were registered. The percentage of illegitimate births was therefore 4·8, or in other words, they were in the proportion of 48 in 1,000 births.

The following Table compares the statistics for Haydock in this respect with those for England and Wales, and for the Registration County of Lancashire.

PROPORTION OF ILLEGITIMATE BIRTHS.

England and Wales	Annual average on the 10 years 1885-94	44 in 1000 Births.
Registration County of Lancashire...	ditto.	43 "
Haydock	Year 1895	48 "

The extremes of the Statistics in the Registrar-General's Annual Report for the year 1894, for the several Registration Counties in England and Wales are respectively, for Essex 29, and for Herefordshire 76, per 1,000 registered births.

DEATHS.

The number of Deaths registered as having occurred in the Township during the year was 165, including 96 males and 69 females.

Of these deaths, 13 were those of "non-residents," including 10 at Haydock Lodge Lunatic Asylum, 1 at the Old Wint Small-Pox Hospital, and 2 at the Haydock Cottage Hospital. Deducting these, and adding 1 death, which was that of a patient from Haydock at the Peasley Cross Fever Hospital, St. Helens, the "corrected number" of deaths, that is the number on which the Death-rate is calculated, is reduced to 153.

Thus reckoned, the Death-rate was 19·6 per 1,000 of the estimated living population, as against 17·7 in the year before, and 17·4 on the yearly average of the preceding 10 years.

The following table gives a classification of the Deaths from all causes according to ages —

Under 1 year	60	total under 5 years ... 97
1 year and under 2 years	25	
2 years and under 3 years	4	
3 years and under 4 years	5	
4 years and under 5 years	3	
5 years and under 10 years	3	total 5 years and upwards ... 68
10 years and under 15 years	2	
15 years and under 20 years	6	
20 years and under 25 years	4	
25 years and under 30 years	3	
30 years and under 35 years	4	
35 years and under 40 years	1	
40 years and under 45 years	5	
45 years and under 50 years	3	
50 years and under 55 years	4	
55 years and under 60 years	6	
60 years and under 65 years	5	
65 years and under 70 years	6	
70 years and under 75 years	8	
75 years and under 80 years	5	
80 years and under 85 years	3	
	165	165

The rate of Infant Mortality, measured by the proportion of deaths of Infants under 1 year to 1,000 births was 191, as against 145 in the year before, and 135 on the yearly average of the preceding 10 years.

THE CAUSES OF DEATH were as follows:—

Small-Pox ...	1	(a patient from St. Helens, at the Old Wint Hospital)		
Measles ...	11	... complicated with	Whooping Cough ... Broncho-Pneumonia ... Bronchitis ... Cancrum Oris ...	3 cases 6 cases 1 case 1 case
Scarlet Fever ...	1			
Diphtheria ...	1			
Membranous Croup...	5			
Whooping Cough ...	11	... complicated with	Measles ... Pneumonia ... Bronchitis .. Convulsions ... Rickets ... Exhaustion ...	2 cases 2 cases 1 case 4 cases 1 ease 1 case
Enteric Fever ...	1			
Diarrhœa ...	9			

The above Diseases form the group known as the "Seven Principal Zymotic Diseases" (Membranous Croup being classed wfth Diphtheria). The total mortality from these Diseases (excluding the case of Small-pox from St. Helens, and including the case of Enteric Fever from Haydock, which proved fatal at the St. Helens Fever Hospital) amounts to the number of 40 Deaths, corresponding to a *Death-rate* of 5·13 per 1000 of the living population, as against 4·57 in the year before, and 3·60 on the yearly average of the ten preceding years.

Influenza ...	3	
Phthisis ...	10	giving a Death-rate of 1·28 per 1000
Other Tubercular Diseases	4	
Bronchitis ...	14	giving a Death-rate from Respiratory Diseases of 3·20 per 1000
Pneumonia ...	11	
Heart Disease ...	12	
Cancer ...	2	
Diseases of Nervous System	22	
Diseases of Digestive Organs	9	
Diseases of Urinary Organs	3	
Want of Breast Milk Atrophy Marasmus Debility from Birth Premature Birth	20	
Senile Decay ...	4	
Other Diseases ...	3	
Childbirth—Puerperal Fever	1	
Injuries ...	7	
	165	

Of the deaths, 4 only were "not certified," the proportion being 2·4 per cent. of the whole number. One of these was the death of an infant who died suddenly in convulsions, and the other three were deaths of infants who only shortly survived birth.

Seven inquests were held in the Township during the year, these being in the cases of deaths from injuries mentioned in the table of causes of death.

These are classified as follows :—

Colliery Accident	1
Slight Colliery Accident, accelerating the fatal results of previously existing disease	1
Other accidents	2
Drowning	1
Burns	1
Scalds	1
	7

The following table shows the number of deaths from Colliery Accidents which have occurred in Haydock during the preceding 10 years :—

Year—	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	Yearly average.
No. of fatalities ...	4	8	1	3	2	5	6	3	1	0	3·3

In order that the most important statistics for Haydock concerning Life and Death and Disease for the year now in consideration may be compared

(1) With the corresponding statistics for the preceding 10 years ;
(2) With the corresponding statistics for the whole of England and Wales during the same periods,

a series of tables have been prepared, which are placed at the end of this report in an Appendix, which also contains the tables "A" and "B," drawn up according to the forms required by the Local Government Board.

For the reason already alluded to, separate statistics cannot be supplied for each of the several wards of the Township.

NOTIFICATION OF INFECTIOUS DISEASES DURING THE YEAR.

During the year 1895 there were notified under the "Compulsory Notification of Diseases Act" 74 cases of infectious diseases, as against 66 in the preceding year.

The following is a tabulated statement of the notified cases, showing the numbers of the separate diseases to which the Act applies, and the months in which they occurred.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec	**Totals**	Corresponding Nos. in 1894.
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	0	1
Diphtheria	...	1	1	...	...	...	...	...	...	1	...	...	3	4
Membranous Croup ...	1	1	1	2	...	1	...	...	. .	1	...	4	11	23
Erysipelas	...	...	1	...	2	2	...	1	1	...	4	...	11	8
Scarlet Fever	...	4	10	4	...	...	4	...	2	1	3	1	29	23
Enteric or Typhoid Fever	..	1	1	...	...	3	2	...	4	5	3	...	19	3
Puerperal Fever... ...	...	1	...	...	...	...	...	...	...	...	...	...	1	4
Totals	1	8	14	6	2	6	6	1	7	8	10	5	74	66

In one case of Enteric Fever, and one case of Scarlet Fever, Diphtheria was also notified as existing concurrently.

I have the satisfaction of reporting to your Council that there has appeared to be increasing appreciation on the part of the public of the arrangements which have been made for the isolation and treatment of cases of Infectious Diseases at the Peasley Cross Hospital, as during the year 18 such cases were removed to the Hospital, including 9 cases of Scarlet Fever and 9 of Enteric Fever.

In the preceding year only 2 cases were removed for treatment at the Hospital.

Small Pox Hospital, Old Wint.—During the year this Hospital was in use from April 12th to July 3rd. 10 cases were admitted. all from St. Helens, 3 in April and 7 in May. One case terminated fatally, the remaining 9 recovered. Although occurring about the same time, the above cases were derived from two separate sources of infection imported into St. Helens

In the previous year only 2 cases, derived from one source of infection, were admitted.

Every possible care has been taken while the Hospital has been in use to avoid any communication with the residents of Haydock. All provisions and supplies needed were daily brought from St. Helens. After use, the buildings have been carefully disinfected. A request made to the St. Helens Corporation on the part of your Council that the ambulance when conveying patients should proceed by the road across the canal, instead of by way of Blackbrook-road, was acceded to.

Some difficulties, however, arose with regard to a disputed right of way, and hindered your Council's wish being completely carried out.

For some of the above particulars I am indebted to the courtesy of Dr. Robertson, Medical Officer of Health of St. Helens, to whom I would take this opportunity of expressing my indebtedness for assisting me on several occasions by making "bacteriological" examinations, which only a "specialist" can reliably attempt.

General Remarks on the Prevalence of Diseases during the Year, and Comments on the Statistics presented.

Measles.—The severe epidemic of this disease, to which I had to allude in my last Annual Report as having commenced about the middle of November, 1894, did not wholly subside until the beginning of February, 1895. During the month of January 10 deaths were registered as due to this disease, and 1 in February. Besides these 11 deaths Measles was registered as being the *secondary* cause of death in 2 other cases in which Whooping Cough was the *primary* cause. During the three months of its prevalence, therefore, Measles was concerned in bringing about 27 deaths as the *primary* cause and 3 as the *secondary* cause, and the mortality was raised to an extent equivalent to 15 per 1000 per annum by this disease alone.

This statement, however, by no means exhausts the fatal effects of the epidemic, for many children, who for the time being recover from the disease, are left in a condition of greatly impaired vitality, and afterwards fall a prey to Tubercular and other diseases.

For some few years to come it is probable that no such severe outbreak of this disease will occur.

Scarlet Fever.—During the year 29 cases of this disease have occurred, as against 23 in the previous year. Only 1 case has proved fatal.

The first cases occurred in February, after almost an entire absence of the disease for the preceding six months. During the three months of February, March and April, 18 cases occurred, the monthly numbers being respectively 4, 10, and 4. 12 houses in all were infected. It is difficult in many cases to trace the origin of the infection. In one case the patient clearly contracted the disease in Liverpool. Some of the cases notified were very slightly marked, and not easily recognizable. Doubtless other cases of the same type existed where no medical attendance was sought, and these may have been the means of conveying infection to others. Only 1 of this first series of 18 cases was removed to the Hospital, this being an adult suffering concurrently from Scarlet Fever and Diphtheria. As at the end of February it seemed likely that the disease might become widely diffused as an epidemic, I addressed to each of the Schoolmasters and Schoolmistresses of the various Elementary Schools in the Township a copy of the following letter.

> "Feb. 23, 1895.
>
> Dear Sir (or Madam),—A few cases of Scarlet Fever (or Scarlatina) have been notified to me within the last day or two.
>
> I am anxious, therefore, to enlist your aid in limiting as far as possible the spread of the infection.
>
> You are doubtless aware that many cases of this disease are so little marked as to pass at first unrecognized. A child may have a very little transient feverish attack, with slight sore throat. There may be no "rash" at all, or it may be so ill developed and last so short a time as to be unnoticed. All the time the child may be going about as usual, and attending school. In a little while the skin begins to peel or "desquamate," and the child is scattering infection all around.
>
> I would suggest, therefore, that if you or your teachers should become aware of any children suffering from sore throat, or presenting any suspicious appearance of rough scaling skin, they shonld be at once sent home, and their parents recommended to get medical advice without delay.
>
> Believe me, Dear Sir (or Madam), yours faithfully,
>
> T. E. HAYWARD, Medical Officer of Health"

I have to acknowledge the courtesy with whith all those addressed undertook as far as possible to comply with what was desired.

Fortunately the disease did not spread so widely as might have been feared from the existence of so many centres of infection.

During the past year, as for several years previously, your Council have continued on my recommendation to supply gratuitously to all notified cases of Scarlet Fever the special "Eucalyptus Disinfectant,' first advocated by Dr. Curgenven, It has been claimed for this, that its use would do away with the necessity for isolating cases of Scarlet Fever; but, even if it had all the power claimed for it, this could only be effectually exerted when applied properly, which, in the absence of skilled nursing at home, cannot always be depended on. However, I have seen myself some cases where its use seemed to have prevented the infeection spreading to other probably susceptible individuals in the same house, and I have iucreasing confidence in advising its continued supply by your Council, as being the *next best thing* to Hospital isolation, which, however desirable, cannot be in all cases carried out.

It may be of interest to note that during the past year, at a meeting of the "Epidemiological Society" a paper on the use and value of this Disinfectant in Scarlet Fever, was read by Dr. Priestley, Medical Officer of Health of Leicester, who had used it in 120 cases of Scarlet Fever at the Leicester Fever Hospital, and had compared the results with those of a nearly similar number of cases treated without it.

As the result of his observation he was convinced that, while he could not concede *all* that was claimed by Dr. Curgenven, the use of this Disinfectant both beneficially affected the course of the disease—as making it less fatal and less liable to complications—and shortened the period of infectiveness.

After an entire freedom from this disease for the months of May and June 4 cases occurred in July, 1 at a house in New Boston Cottages, and 3 simultaneously in a house at Blackbrook. These were all removed to the Peasley Cross Hospital. No cases occurred in August In September 2 further cases were notified in separate houses. These cases were both removed to the Hospital. 1 case occurred in October, which was kept at home. In November 3 cases were notified in three separate houses, 2 cases were removed, and 1 kept at home. In December 1 case occurred, which was also kept at home.

As the result of these removals to the Hospital, six separate centres of infection were got rid of, and they illustrate the advantages of dealing with *first* cases. When once this disease becomes widely diffused it passes beyond the possibility of being dealt with otherwise than at the patients' homes.

Whooping Cough has been very prevalent during the year, and has accounted for 11 deaths, against 2 from this cause in the previous year. This disease has not been so fatal in any year since 1889.

Influenza.—This now much dreaded disease prevailed as a severe epidemic in Haydock during the three months from the middle of January to the middle of April, and again, to a less extent, in the months of November and December. 3 deaths were registered as due to this disease. As, however, the death-rate from Respiratory Diseases for the year has amounted to 3·20 per 1,000 of the living population as against 2·68 and 1·92 respectively in the years 1893 and 1894, it is probable that this increase of mortality was also due to the effects of Influenza. A memorandum was issued by Dr. Thorne Thorne, the principal Medical Officer of the Local Government Board, dealing with the now well-established fact of the *Infectious* nature of the disease, and the precautions which it is desirable to adopt during its prevalence. Universal experience, however, goes to show, to quote from the above mentioned memorandum, that "Influenza is a disease against which it is most difficult to apply measures of prevention with any substantial prospect of success." In most cases, and especially in the dwellings of the working classes, it is utterly impossible to attempt any effective measures for isolating the sick from the healthy. By avoiding "chill," and all such causes as tend to lower the general health, individuals may hope that their "resisting power" may keep the invading disease-germs at bay.

Diphtheria and Membranous Croup.—In my last Annual Report I alluded to Membranous Croup at some length, and explained the great difficulty which often exists in distinguishing this disease, on the one hand from true Diphtheria, and on the other from simple Catarrhal Laryngitis.

During the year 1895, 11 cases of Membranous Croup were notified, against 23 in the preceding year. 5 of the cases proved fatal.

Of Diphtheria 3 cases were notified. Adding the 2 other cases in which Diphtheria was notified as existing together with other diseases, the number is increased to 5.

On comparing the statistics with regard to these diseases for such portion of the Administrative County of Lancashire as includes the districts in which Compulsory Notification is in force (embracing about nine-tenths of the population of the Administrative County) with the corresponding statistics for Haydock, I find that while the number of notified cases of Membranous Croup in Haydock is greatly in excess, the mortality is only about one half of that in the Administrative County.

With regard to Diphtheria, the proportion of notified cases to population is about equal in Haydock to that in the Administrative County.

Diarrhœa.—Nine deaths were registered as due to this ailment—a larger number than in any year of the preceding 10 years, except 1893, when the number was 11.

The high temperature which existed during a large portion of the second and third quarters of the year greatly conduced to the prevalence of this disease.

Typhoid (or Enteric) Fever.—The climatic conditions of the year have also favoured the spread of this disease. 19 cases have been notified (with 2 deaths), as against only 3 cases in the previous year. The Table of Cases of Infectious Diseases Notified will show that the period of greatest prevalence was during the months of September, October, and November.

The local distribution of the cases was as follows :

Blackbrook Road	2
Old Wint Lane	1
Juddfield Street	1
Toll Bar Cottages	4
Clipsley Lane	1
Holly Bank	1
Boston Cottages	1
Vista Lane	1
Penny Lane	1
Ashton Road	1
Haydock Lane	5

Local insanitary conditions, chiefly defective privy midden arrangements, were found to exist in connection with most of the cases.

This was found to be especially so with regard to the two localities where groups of cases occurred, namely, Toll Bar Cottages, with Juddfield Street, and Haydock Lane.

Two Special Reports were presented to your Council, dated respectively 25th April and 3rd October, with regard to the sanitary condition of Toll Bar Cottages.

During the year I have drawn up a paper attempting to give such instructions regarding the treatment of cases of Typhoid Fever when kept at their own homes, as might be easily understood, and prove of some service. Of this the following is a copy :—

Haydock Urban District Council.

Instructions concerning Cases of Typhoid Fever when Treated in their Own Homes.

I.—As regards the Dangers to which the Patients themselves are Exposed.

In this disease a number of Ulcers (or raw sores) are formed along the bowels, and there is great danger, unless proper care is taken, of their perforating or eating through the bowel and causing fatal inflammation. The points most important to remember, therefore, are:

(1) Let the patient be kept at absolute rest in bed. Do not let him get out of bed for anything.
(2) Do not give opening medicine on any account, unless specially ordered by the doctor.
(3) Do not let any solid food at all be given unless or until the doctor specially permits it, no matter how hungry and ravenous the patient may seem.

II.—As regards the Danger to Others of Infection.

The germs which give rise to this disease are contained in the motions and urine of the patient. Therefore, before the motions and urine are disposed of by being thrown down the drain, or into the privy or ash-pit, they should be acted upon by some " disinfectant which has the power of killing the germs.

Before the disease is fully recognized the privy will be already contaminated by the infectious evacuations. Therefore, directly the case of Typhoid Fever is notified, the Sanitary Inspector will place down the privy and over the ash-pit a plentiful supply of Chloride of Lime or other disinfecting powder, so as to prevent as far as possible the danger of infection to which others using the privy would otherwise be exposed.

The disinfectant supplied by the Haydock Urban Sanitary Authority for use in cases of Typhoid Fever is that known as " Izal." The directions for using this are as follows:

Two tablespoonfuls of the Izal are to be mixed with 5 pints of water. This will be spoken of as " diluted Izal."

(1) The motiods and urine of the patient must be at once thoroughly mixed with twice their quantity of the diluted Izal, and allowed to stand in a covered vessel outside the house, for at least one hour before being thrown away.
(2) The bed-pan, chamber vessel, or urine bottle, must be thoroughly rinsed out after use with the diluted Izal.
(3) All bed-linen or bed-clothes soiled with the evacuations must be soaked for two or three hours in the diluted Izal before being put to wash.
(4) Those who have attended to the patient must at once thoroughly wash their hands with soap and water, and afterwards rinse them for a few minutes in diluted Izal.
(5) In cleansing a patient after an action of the bowels, pieces of clean old linen or of cotton wool should be used, and immediately burned.

October, 1895. T. E. HAYWARD, M.B., Medical Officer of Health.

In my Annual Report for 1893, I discussed fully the mode of causation and the means of prevention of Typhoid Fever.

I would here, therefore, take occasion to merely briefly allude to the chief points in connection therewith.

(1) Typhoid Fever is a PREVENTIBLE disease.
(2) It is closely associated with Filth, and especially the filth of human excrement.
(3) Its actual cause is now generally believed to be the reception into the body, by swallowing, of the special germs, which live, and grow, and multiply after their own kind, and are known as "Typhoid Bacilli."
(4) It is yet a disputed point as to whether these germs are always derived from a pre-existing case of the disease, or whether some microbes, ordinarily harmless, may not, under certain conditions, take on virulent properties not before possessed, and thus become changed into Typhoid Bacilli.
(5) However developed, these germs may gain access to the body by being swallowed in water, milk, or food, or, through being diffused in the air in association with the noxious effluvia arising from privies or sewers, they may be inhaled and swallowed with the saliva.
(6) The contents of privy-middens, and the surrounding soil soaked with excremental filth, when once contaminated by these germs, afford them a breeding ground. They may remain in a dormant condition for long periods, and when suitable conditions arise, such as those associated with a hot and dry season, they may develope and widely diffuse themselves.
(7) The means of prevention, therefore, of Typhoid Fever resolve themselves into Personal and Public Cleanliness.

Phthisis.—The Death-rate from this disease was more than double that for the previous year, and about 25 per cent. above the average of the preceding ten years. The severity of the winter doubtless tended to accelerate the fatal termination of some cases.

Cancer.—It may be of some interest to note that during the past year a discussion took place in the "British Medical Journal" with regard to the belief held by some medical authorities, that in Shropshire, colliers, as a class, are remarkably exempt from cancer. Haydock being a place where probably, at least, three-fourths of the working male population are employed in coal mines, it appeared worth while to investigate the statistics for the district relating to Cancer. I, therefore, examined the Death-returns for the 10 years, 1885-94, and found that during this period there were registered in Haydock 27 deaths from "Cancer" and "Malignant Disease," including 15 males and 12 females. Of the 15 males, 11 had been workers in coal mines. It thus appears that in this district colliers do not enjoy entire immunity from this disease.

However, as will appear in Table XI. in the Appendix, it was found that the Death-rate from Cancer in Haydock during this period, was considerably lower than the corresponding Death-rate for England and Wales.

Some degree of relative immunity from Cancer, therefore, appears to be enjoyed by the population of this district, but whether this may be due at all to the large proportion of colliers included in the population, is a matter more easy to speculate upon than to prove.

The Birth-rate was as usual very high, and did not differ materially from that for the previous year, nor from that for the average of the 10 preceding years.

The Death-rate from all causes for the year was 1·9 per 1000 higher than that for the preceding year, and 2·2 higher than that for the average of the 10 years before. It was also 0·9 higher than that for the whole of England and Wales for the same year.

The large number of Deaths from the Zymotic Diseases, and the large Infantile Mortality more than account for this excess.

The Death-rate from Zymotic Diseases was the highest recorded for Haydock since the year 1885.

Measles, Whooping Cough, and Diarrhœa have been the diseases chiefly concerned in raising this Death-rate.

The rate of Infant Mortality is so considerably higher than any recorded during the years of which I have statistics, from 1884 onwards, as to demand some special examination.

It may be noted at the outset, that this rate for the whole of England and Wales for the year 1895 was unusually high, but while for England and Wales the rate was increased on the average of the preceding 10 years by 10 per cent. the corresponding increase for Haydock amounted to 34 per cent.

The following are tabular statements with regard to the *Ages* and *Causes* of the Infant Deaths for the year:—

AGES AT DEATH.

Less than 24 hours	8
1 to 7 days	1
1 to 4 weeks	7
1 to 3 months	10
3 to 6 months	16
6 to 12 months	18
	60

CAUSES OF DEATH.

Zymotic Diseases	
Measles	2
Whooping Cough	5
Membranous Croup	1
Diarrhœa	8

Respiratory Diseases	
Bronchitis	5
Pneumonia	3
Diseases affecting Nervous System	
Teething	3
Spasmodic Croup	2
Convulsions	5
Diseases of Digestive Organs	
Enteritis	2
Gastro-Intestinal Catarrh	1
Other Diseases	
Tuberculosis	1
Eczema	1
Disorders affecting General Nutrition and Vitality	
Want of Breast Milk	2
Marasmus	3
Premature Birth	8
Debility from Birth	8
	60

The causes which would appear to have contributed to the excessive Infant Mortality are the following:—

(1) The extremes of temperature which have existed during the year. The very low temperature of the first quarter of the year having been very fatal to weakly infants, while the intense heat which was present during the large portion of the second and third quarters, tended to the prevalence of diarrhœa.

(2) Early and improvident marriages giving rise to weakly offspring.

(3) The greater number of illegitimate births.

(4) Probably a less robust physique among many of the new-comers to the district, than that of the older inhabitants.

(5) Improper feeding from ignorance or carelessness—although this cause in Haydock does not play such a large part in infant mortality as it does in districts where so many mothers work in mills and factories.

Mortality from Puerperal Fever and the other Accidents of Childbirth.—The statistics on these points, presented in Tables VIII. and IX., are of interest as bearing on the subject of the legislation, which is now being proposed, to ensure the proper training and registration of midwives.

The fact stands forth, and cannot be ignored, that during the 10 years, 1885-94, the mortality among mothers in Haydock has been **twice as great** as that for the whole of England and Wales.

GENERAL REVIEW OF THE EXISTING SANITARY CONDITIONS OF HAYDOCK, AND RECOMMENDATONS AS TO THE LINES OF FUTURE IMPROVEMENTS.

1.—Water Supply.—As regards this most important matter, Haydock is fortunate in possessing a public supply derived from the Rivington Reservoirs of the Liverpool Corporation. This is distributed to all the houses in the township, with the exception of about 20 outlying dwellings. By the courtesy of Mr. J. Parry, the Water Engineer of the Liverpool Corporation, I have been favoured with a copy of the most recent analysis of the Rivington water. This does not differ materially from that quoted in full in my last annual report, and goes to show that the water is of excellent quality.

The supply is constant direct from the Rivington main pipe, but as in the event of a breakdown in this pipe, the direct supply is cut off, it is necessary to have storage reservoirs to be drawn upon when the need arises. The two such reservoirs in use are

(1) The small specially constructed covered reservoir, for supplying Millfield Lane and the higher part of Haydock Lane.

(2) The large open Reservoir, known as the "North Florida," which is used for supplyiug the rest of the Township.

During the year, the question of the fitness or otherwise of this latter reservoir for such use has been under discussion by your Council.

It will be within the knowledge of your Council that I have on several occasions in my Reports expressed my belief that the reservoir is unsuitable for storing a public water-supply, and that the use of the water drawn from it is likely to be attended with danger. I have previously based my objection chiefly on the possibility of the water in the Reservoir being some time or other contaminated with the special germs of Cholera or Typhoid Fever, and so becoming an agency in the wide spread of these diseases. The process—which is going on at the time of writing—of manuring the land immediately around this reservoir with privy-midden refuse, gives ground for saying that such possibility is not a far-fetched supposition.

In order to assist your Council in arriving at right conclusions regarding this matter, analyses have been made, the detailed tabular statements of which I have already submitted to your Council, and need not here quote again. The results and conclusions based on these analyses with regard to the three separate sources of supply are as follows:—

(1) The direct supply drain from the Rivington main, as delivered in the house taps.

This is a water of a very high degree of purity.

(2) The water contained in the small covered Reservoir in Millfield Lane, which is drawn, of course, from the Rivington main, and which I understand is changed every month. This reservoir only contains about two days' supply for the whole Township.

This is also a water of a very high degree of purity, and contains nothing to which any exception can be taken. Such small amount of vegetable matter as it contains is usually present in waters collected from moorland areas like those which supply the Rivington Reservoirs. The Rivington water, as stored in this Reservoir for a limited period, and then renewed, does not undergo any sensible deterioration.

(3) The water contained in the large open reservoir (North Florida), which also was originally derived from Rivington, but which during long storage has undergone such changes as are brought about by the following agencies :—

(a) Evaporation.

(b) Rainfall.

(c) The taking up in solution of such constituents of the materials of which the bottom and banks consist as are soluble.

(d) Probably some degree of percolation on one side of the reservoir, where the land is higher than the water level.

(e) But more especially the growth therein of low forms of vegetable life, such as "Algæ."

This water, while it shows no evidence of sewage contamination, is found to be loaded with decaying vegetable matters in suspension and solution, and is teeming with the minute living organisms, known as "microbes," each cubic centimetre (that is about 18 drops) containing over a million. According to Professor Koch, a distinguished authority, the number of microbes in good drinking water should not exceed 300 per cubic centimetre.

The Rivington water has therefore greatly deteriorated during its long storage in the reservoir. The consumption of such water, while in the absence of the specific germs, it could not cause Cholera or Typhoid Fever, would be extremely likely to set up attacks of acute Diarrhœa, and in other ways cause derangements of health.

Thus, apart from the risks of accidental contamination by the germs of special diseases, there are continually present such conditions as to warrant the condemnation of this water as a source of public supply.

I submit, therefore, this matter to your Council as one demanding earnest consideration, in the interests of the public health.

The following list of the periods of interruption in the direct supply from Rivington, which occured during 1895, has been kindly furnished to me by Mr. Thompson, the Clerk and Surveyor to your Council :—

January 10th to 15th,
April 16th to 17th
July 8th to 9th
August 10th to 12th
September 17th to 19th
October 21st to 24th
November 27th to 29th
December 27th to 30th

During these intervals the supply has been derived from the small covered reservoirs only on 7 days, and from the large open reservoir also on 13 days.

I would recommend to your Council, that until some better provision can be made, whenever the direct supply is to be cut off, public notice should be issued, and people should be advised to boil the water before using it for drinking It is of no good to advise filtration, because recent careful experiments which have been made have gone to show that ordinary domestic filters are absolutely useless and unreliable for removing disease germs from drinking water.

II.—Drainage and Disposal of Excreta.—These matters, which, together with the water supply, stand out as of the highest and chiefest importance in affecting the Public Health, were so fully discussed in my last annual Report, that I have on this occasion but little either to alter or to add.

In the Report just referred to, I drew a contrast between Haydock as it *was* 20 or 30 years ago, and Haydock as it *now is*. Great as have been the improvements effected, much, very much, yet remains to be done, and, but that this Report has already proceeded to such length, I might seek to draw in detail a contrast between Haydock as it is, and Haydock as it *might be*.

The drainage arrangements, which have grown with the growth of the Township, without any fixed or systematic plan, may some day be replaced by a regularly planned system of sewers, with proper provision at their outlets for adequately purifying the effluent before it goes, as it does now, to add something to the pollution of already foul streams.

The Privy-midden system of dealing with Excrement which, at its best, cannot but be both attended with nuisance and danger, may some day be replaced by other arrangements ; not that I would advise that, when the time may come for complete structural alterations, the pail system, in any form, be introduced, for this may be attended also with nuisance and danger but little less than that of the Privy-midden system. But when once a proper system of public sewers is constructed, it may be possible to replace Privy-middens by the "water-carriage" system, and adopt one of the modern forms of "slop-water" or "waste-water" closets, which, in many districts, are now in efficient use.

In drawing these imaginary pictures, I do so with the full consciousness that they may for long remain ideal, for with public, as with personal expenditure, there has to be a relation between *ends* desired and *means* possessed.

As bearing on this question, there are two practical points to which I would invite the attention of your Council :—

(1) The present plan of draining the ash.pits into the existing public drains will, sooner or later, tend to choke them up.

(2) The sewage of privy-midden districts has been found but little different in its degree of foulness and impurity to that of Towns, where the whole quantity of excrement goes direct into the sewers.

III.—Public Scavenging.—This department of Sanitary work, which is under the direct control and management of your Council, affords room for still greater efficiency. For there has appeared, from my observation in the course of inspections, to be need for more regular and systematic emptying of the privies and ash-pits, and even though it should entail the employment of a larger staff of men, I would urge upon your Council the desirability—in the interests of Public Health—of limiting to the utmost the keeping in the neighbourhood of dwellinghouses of large masses of decomposing excremental filth.

SANITARY INSPECTION DURING THE YEAR.—The Inspector of Nuisances reports that the Slaughterhouses, Bakehouses, Cowsheds, and Milkshops have been inspected. and found in good order.

Besides numerous verbal notices, which have been attended to without further trouble, written noticeshave been served in the following cases:—

Defective Ashpits	12
Defective Drains	12
Improper Pigstyes	4
Offensive Manure heaps	3

No legal proceedings have been taken.

SANITARY IMPROVEMENTS CARRIED OUT DURING THE YEAR.—Under this heading may be rcorded the following.

(1) The semi-sewer ditch along Old Wint Lane has been laid with pipes and covered in for the extent of about 84 yards.

(2) The privy-middens in connection with Toll-Bar Cottages and Juddfield Street have been improved in the way of being rendered less deep and of being drained.

(3) The systematic numbering of the houses throughout the Township which has been carried out during the year, although more properly coming under the heading of social improvement, will not be without its effect in facilitating sanitary work.

In conclusion, I would desire to represent to your Council, as the Local Sanitary Authority, entrusted with powers and responsibilities so largely affecting the welfare of the district, that money spent in improving sanitary conditions is money well invested, for, as it has well been said, "Public Health is Public Wealth."

If the advice which I have given were adopted, and the suggestions which I have made were carried out, my occupation as a general practitioner of medicine would be to a large extent taken away. But it is, and always has been, the aim of the Medical Profession as a whole, to seek the general good rather than its own.

I have not shunned to declare the whole counsel of Sanitary Science. Not merely in my individual capacity have I addressed your Council, for I have nothing of knowledge which I have not received, but as being placed in a position to give voice to the collective wisdom and experience of those who have devoted themselves to the study of such matters as make for the Public Health and Well-being.

I have the honour to be, Sir,

Your obedient Servant,

T. E. HAYWARD, M.B.,

Medical Officer of Health

APPENDIX.

I.—Table showing the estimated Population, number of Births, corrected number of Deaths, number of Deaths from Zymotic Diseases, &c., for the several years from 1885:—

Year.	Estimated Population.	Births.	Corrected No. of Deaths.	Deaths from Zymotic Diseases.	Infant Deaths.	Deaths from Phthisis.	Deaths from Respiratory Diseases.	Deaths from Influenza.
1885	6,127	239	130	52	29	6	23	—
1886	6,191	245	100	16	37	6	24	—
1887	6,255	256	127	32	32	9	20	—
1888	6,320	222	101	16	27	7	11	—
1889	6,386	229	102	24	37	6	21	—
1890	6.452	252	101	13	33	5	21	2
1891	6,520	272	117	12	39	10	26	5
1892	6.624	270	115	15	37	8	29	7
1893	6,697	304	114	20	37	5	18	0
1894	6 770	274	120	31	40	4	13	1
1895	7,800	313	153	40	60	10	25	3

II—Table showing the principal Vital and Mortal Statistics for Haydock for the several years from 1885:—

Year.	Birth-rate.	Death-rate	Zymotic Death-rate.	Infant Deaths per 1,000 Births.	Death-rate from Phthisis.	Death-rate from Respiratory Diseases
1885	39·0	21·2	8·48	121	0·97	3·75
1886	39·5	16·1	2·58	151	0·96	3·87
1887	40·9	20·3	5·11	125	1·43	3·19
1888	35·1	15·8	2·53	122	1·07	1·73
1889	35·8	15·9	3·75	161	0·93	3·28
1890	39·0	15·6	2·01	130	0·77	3·27
1891	41·5	17·8	1·83	143	1·53	3·97
1892	40·7	17·3	2·26	137	1·20	4·37
1893	45·3	17·0	2·98	121	0·74	2·68
1894	40·4	17·7	4·57	145	0·59	1·92
Yearly Average for 10 years	39·7	17·4	3·60	135	1·01	3·19
1895	40·1	19·6	5·13	191	1·28	3·20

III.—Table showing the number of Deaths from each of the Seven Principal Zymotic Diseases in the several years from 1885:—

	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	Yearly Average for 10 Years.	1895
Small-pox	0	0	0	0	0	0	0	0	0	0	0	0
Measles	28	2	8	1	0	4	1	1	1	16	6·2	11
Scarlet Fever	19	1	17	5	3	2	0	2	4	2	5·5	1
Diphtheria	0	0	0	1	1	0	1	1	0	1	0·5	1
Membranous Croup	1	0	2	7	1	1	2	0	1	7	2·2	5
Whooping Cough	1	7	0	0	11	1	2	8	0	2	3·2	11
"Fever"	1	2	1	2	2	5	1	1	3	0	1·8	2
Diarrhœa	2	4	4	0	6	0	5	2	11	2	3·6	9

IV.—Table showing the respective Death-rates per 1,000 of the population from each of the Seven Principal Zymotic Diseases for the several years from 1885:—

	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	Yearly Average for 10 Years.	1895
Small-pox	0·00	0·00	0·00	0·00	0·00	0 00	0·00	0·00	0·00	0·00	0·00	0·00
Measles	4·56	0·32	1·27	0·16	0 00	0·62	0·15	0·15	0·15	2·35	0·96	1·41
Scarlet Fever	3·09	0·16	2·71	0 79	0·46	0·31	0·00	0·30	0·59	0·29	0·86	0·13
Diphtheria Membranous Croup	0·16	0·00	0·31	1·26	0·31	0·15	0·46	0·15	0·15	1·17	0·41	0·77
Whooping Cough	0·16	1·13	0·00	0·00	1·72	0·15	0·30	1·20	0·00	0·29	0·49	1·41
"Fever"	0·16	0·32	0·16	0·31	0·31	0·77	0·15	0·15	0·45	0·00	0·27	0·26
Diarrhœa	0·32	0·64	0·63	0·00	0·93	0·00	0·76	0·30	1·63	0·29	0·54	1·15

V.—Table showing the comparison of the Annual Average Death-rates from the Seven Principal Zymotic Diseases respectively, for the Urban Sanitary district of Haydock for the 10 years 1885-94, with the corresponding Death-rates for England and Wales for the same period.

	Small-pox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Fever	Diarrhœa
England and Wales	0·03	0·45	0·22	0·20	0·43	0·20	0·62
Haydock	**0·00**	**0·96**	**0·86**	**0·41**	**0·49**	**0 27**	**0·54**

VI.—Table showing the comparison of the principal Vital and Mortal Statistics for the Urban Sanitary District of Haydock with those for the whole of England and Wales for corresponding periods.

			Birth-rate	Death-rate	Death-rate from Zymotic Diseases	Infants' Deaths per 1000 Births
(a) For the separate Quarters of the Year 1895	1st Quarter	England and Wales	32.1	22·8	1·34	152
	,,	Haydock	45·1	26·2	12·82	215
	2nd Quarter	England and Wales	30·8	17·7	1·32	129
	,,	Haydock	34·8	17·9	2·05	191
	3rd Quarter	England and Wales	30·2	17·4	3·50	201
	,,	Haydock	43·5	17·4	3·58	141
	4th Quarter	England and Wales	28·3	17·5	2·35	161
	,,	Haydock	36·9	16·9	2·05	222
(b) For the whole Year 1895		England and Wales	30·3	18·7	2·14	161
		Haydock	40·1	19·6	5·13	191
(c) Yearly average of the 10 yrs. 1885-95		England and Wales	31·2	18·9	2·59	146
		Haydock	39·7	17·4	3·60	135

VII.—Table showing the comparison of the Death-rates from Phthisis, and from Respiratory Diseases, for Haydock, with the Death-rates from these Diseases (a) for England and Wales, and (b) for the Registration County of Lancashire.

		Phthisis	Respiratory Diseases
Annual Average Death-rates for the 10 years 1885-94.	England and Wales	1·59	3·66
	Lancashire	1·79	4·94
	Haydock	1·01	3·19

VIII.—Table showing the mortality from Puerperal Fever and the other Accidents of Childbirth in Haydock, for the respective years from 1885.

	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	Yearly Averages for 10 years	1895
Puerperal Fever	0	1	4	0	1	1	2	1	1	2	1 3	1
Other Accidents of Childbirth	3	1	0	1	1	0	2	0	3	5	1·6	0
Total	3	2	4	1	2	1	4	1	4	7	2·9	1

IX.—Table showing the Average Yearly Maternal Mortality per 1,000 registered Births from Puerperal Fever and other accidents of child-birth taken together for Haydock, compared with England and Wales and the Registration County of Lancashire, for the 10 years 1885-94:—

England and Wales	5·06
Registration County of Lancashire	6·10
Haydock	10 10

For 1895 the Maternal Death-rate for Haydock was 3·2, as against 25·5 in 1894.

X.—Table showing the number of Deaths from Cancer and Malignant Disease registered in Haydock for each of the 10 years 1885-94:—

	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894
No. of Deaths:	1	2	3	4	3	3	3	0	5	3

(Several deaths of non-residents are excluded.)

XI.—Table showing the comparison of the Annual Average Death-rate from Cancer in Haydock for the years 1885-94 with the corresponding Death-rate for the whole of England and Wales.

England and Wales	0·653 per 1,000 population.
Haydock	0·418 ,, ,, ,,

The extremes in the statistics of the Registrar-General's Annual Report for the year 1894 for the several Registration Counties of England and Wales are respectively 0·452 for Monmouthshire and 1·156 for Huntingdonshire per 1,000 population.

A.

Table of DEATHS during the Year 1895, in the Haydock Urban Sanitary District, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics, public institutions being shown, as separate localities. (*Columns for Population and Births are in Table B.*)	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																					
													FEVERS.																	
(a)	At all ages. (b)	Under 1 year. (c)	1 and under 5 (d)	5 and under 15 (e)	15 and under 25 (f)	25 and under 65 (g)	65 and up-wards (h)	(i)	1 Smallpox	2 Scarlatina.	3 Diphtheria.	4 Membranous Croup.	5 Tyhpus.	6 Enteric or Typhoid	7 Continued.	8 Relapsing.	9 Puerperal.	10 Cholera.	11 Erysipelas.	12 Measles.	13 Whooping Cough.	14 Diarrhœa and Dysentry.	15 Rheumatic Fever.	16 Phthisis.	17 Bronchitis, Pneumonia and Pleurisy.	18 Heart Disease.	19 Influenza.	20 Injuries.	21 All Other Diseases.	22 TOTAL
Township of Haydock	149	60	37	5	9	24	14	Under 5		1	1	5								11	11	8			20			1	39	97
								5 upwds.						1			1					1		10	5	11	3	3	17	52
Haydock Lodge Lunatic Asylum..	10					4	6	Under 5																						
								5 upwds.																					10	10
Joint Smallpox Hospital, for St. Helens and Haydock, Old Wint, Haydock	1					1		Under 5																						
								5 upwds.	1																					1
Haydock Cottage Hospital.. ..	5				1	2	2	Under 5																						
								5 upwds.																		1		3	1	5
TOTALS	165	60	37	5	10	31	22	Under 5		1	1									11	11	8			20			1	39	97
								5 upwds.	1			5		1			1					1		10	5	12	3	6	28	68

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the district among persons belonging thereto.	1					1		Under 5																						
								5 upwds.						1																1
Deaths occurring within the district among persons not belonging thereto	13					6	7	Under 5																						
								5 upwds.	1																			1	11	13

B.

Table of POPULATION, BIRTHS, and of NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1895, in the Haydock Urban Sanitary District; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all Ages		Registered Births	Aged under 5 or over 5	New Cases of Sickness in each Locality, coming to the knowledge of the Medical Officer of Health.													Number of such Cases Removed from their Homes in the several Localities for Treatment in Isolation Hospital.												
					1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12	13
									Fevers													Fevers								
	Census 1891	Estimated to middle of 1895			Smallpox	Scarlatina	Diphtheria	Membranous Croup.	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas			Smallpox	Scarlatina	Diphtheria	Membranous Croup	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas		
(a)	b	(c)	(d)	(e)																										
Township of Haydock	6535	7800	313	Under 5		13	1	10		1					3				3				1							
				5 upwds.		16	2	1		18			1		8				6				8							
Totals	6535	7800	313	Under 5		13	1	10		1					3				3				1							
				5 upwds.		16	2	1		18			1		8				6				8							